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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,509	09/11/2001	Larry V. Presley	Presleyutill	7895
26496	7590	04/16/2004		EXAMINER
GREENBERG & LIEBERMAN				MAYEKAR, KISHOR
314 PHILADELPHIA AVE.				
TAKOMA PARK, MD 20912			ART UNIT	PAPER NUMBER

1753

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/682,509	PRESLEY, LARRY V. <i>ed</i>
	<b>Examiner</b>	<b>Art Unit</b>
	Kishor Mayekar	1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 July 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-6 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The disclosure stands objected for reasons as of record because the Office does not receive any attached substitute specification per the remarks of July 21, 2003.

### *Oath/Declaration*

2. The oath or declaration stands defective for the reasons as of record because the Office does not receive any attached substitute specification per the remarks of July 21, 2003.

### *Claim Objections*

3. Claim 6 is objected to because of the grammatical error in the phrase "a first and second end" and typo error "vetical". Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 as now amended recites the limitation that a series of bracing members attached to the exterior of the main hollow body so as to ... prevent damage to the photoreactor plate (emphasis added). However, there is nowhere in the specification has the support for the limitation "to prevent damage to the photoreactor plate" as now claimed.

Also, new claim 5 recites the limitation that "the waste water is neutralized by use of the photoreactor plate and a photocatalyst". However, there is no support for the limitation recited in claim 5.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, the phrase "communicating" (two occurrences) needs to be replaced with --configured to communicate-- to eliminate reference to a method of operating the device. Also, the claim is indefinite for reciting "a photocatalyst" as part of the structure of the device.

*Claim Rejections - 35 USC § 103*

8. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over ORR, JR. et al. (4,095,115) in view of either ZIMEK et al. (5,397,444) or CROSBIE (6,165,423), all the references cited in the last Office action. ORR discloses in Figs. 1 and 2 that the apparatus contains a tubing member which comprises a main hollow body with first and second ends, a rectangular photoreactor plate 20 placed in communication with the first end, a generally rectangular slotted opening in fixed communication with the first end to receive the rectangular photoreactor plate. ORR does not detail the securing of the plate to the hollow body. The differences between ORR and the above claims are the provision of a series of bracing members and a series of tubing communicating with the second end of the hollow body. ZIMEK shows both the limitations in an apparatus with means for applying a corpuscular radiation to reactants for initiating or perfecting chemical reaction (see Fig. 1 or 2). CROSBIE shows the same in an ozonizer (see abstract and Fig.1). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified ORR's teachings as suggested by either ZIMEK or CROSBIE because 1) as to the first difference, the selection of any of known equivalent means of securing the plate to the hollow body would have been within the level of ordinary skill in the art; and 2)

as to the second difference "making elements separable was held to have been obvious", *In re Dulberg* 129 USPQ 148.

As to the subject matter of each of claims 2-5, since the claims are directed to a device, each of the limitation cannot be given any patentable weight as it has been held that "apparatus claims cover what a device is, not what a device does, *Hewlett-Packard Co. v. Bausch & Lomb Inc.* 15 USPQ2d 1525.

9. New 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over ORR '115 in view of CROSBIE '423. ORR is applied above further discloses the use of the device for sewage treatment or water purification (col. 2, lines 38-44). The further difference between the references applied above and the claim is the shape of the bracing members. CROSBIE as applied shows the use hose clamps to secure a member to the hollow body. As such, the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified ORR's teachings as suggested by CROSBIE because the selection of any of known equivalent hose clamps for securing the plate to the hollow body would have been within the level of ordinary skill in the art.

*Response to Arguments*

10. Applicant's arguments filed July 21, 2003 have been fully considered but they are not persuasive because of the new grounds of rejection as set forth in the paragraph above.

*Conclusion*

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

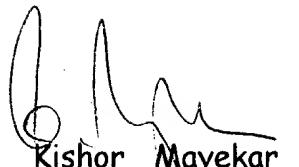
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Kishor Mayekar  
Primary Examiner  
Art Unit 1753